

ABSTRACT

A hybrid wireless link **100** of the present invention provides a gateway between two wired data systems **102**, such as backbone fiber networks, and comprises a laser portion **104**, a radio frequency portion **106**, and a controller **108**. The laser portion **104** and the radio frequency portion **106** provide, side-by-side and point-to-point, a free-space optical wireless link and a radio frequency wireless link. The controller **108** may be designed to respond to atmospheric conditions based on environmental information such as weather tables or the transmit/receive power of the laser portion **104** and the radio frequency portion **106**, with signal switched between the laser portion **104** and the radio frequency portion **106** with a binary switch or a variety of latched levels using an incremental switch. The hybrid wireless link **100** may also use multiple channels and may be configured for a variety of networks including multi-channel ring topologies.